

Abstract

Computer System and Method for Monitoring a Traffic System

A monitoring system (100) and corresponding method for a traffic control system is disclosed. The traffic control system includes a plurality of traffic lights (301 to 305). The monitoring system (100) includes an inbound interface component (110) configured to receive a stream of sensor data from a plurality of statically mounted visual sensors (201 to 205). Each visual sensor is configured to capture light signals of at least one of the traffic lights and each traffic light is sensed by at least one of the visual sensors. The received sensor data includes a current signal status of each traffic light. Further, an analytics component (120) of the monitoring system configured to predict at least one future signal status for each traffic light of the plurality of traffic lights based on the use of a machine learning algorithm applied to current signal status data and previously received signal status data. The at least one future signal status includes the expected point in time when the current signal status will switch from the current to the at least one future signal status. An outbound status provisioning component (130) of the system is configured to send at least one message (M1, M2, M3) to a vehicle (401, 402, 403), wherein the at least one message includes the current signal status and the at least one future signal status of at least one traffic light (302, 303, 304). The sent message is configured to influence the operation of the vehicle.

Figure 1